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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,365	12/10/2004	Kenichiro Kodama	Q84976	5580

23373 7590 12/22/2005

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EXAMINER	
LY, NGHI H	
ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding. –

Office Action Summary	Application No.	Applicant(s)	
	10/517,365	KODAMA ET AL.	
	Examiner	Art Unit	
	Nghi H. Ly	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/07/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woo (US 6,681,125) in view of Aoto (US 6,615,055).

Regarding claim 1, Woo teaches a folding type portable radio communication terminal (see fig.2) comprising: a first chassis provided with a display part at its front surface side (see fig.2, item 12), a second chassis provided with an operation part at its front surface side (fig.2, item 13), a coupling part for openably/closably coupling end parts of the first and the second chassis so that the front surface sides the second

chassis and the first chassis face each other (see fig.2, item 15), and a whip antenna for data transmission/reception provided in the coupling part side end part of the second chassis to be capable of being pulled out (see fig.2, antenna 20, see column 3, lines 45-58 and see column 4, lines 49-64), characterized in that in a state where the first and the second chassis are opened (see fig.2, two chassis are opened), the whip antenna is pulled out in a direction of approaching the first chassis and is held (see fig.2, the antenna 20 is pulled out in a direction of approaching the first chassis).

Woo does not specifically disclose the antenna is pulled out in a direction of approaching a back surface side of the first chassis and is held.

Aoto teaches the antenna is pulled out in a direction of approaching a back surface side of the first chassis and is held (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

Regarding claim 2, Woo teaches the whip antenna is formed into a curved shape in advance (see 3, lines 45-58, since Woo teaches whip antenna, the teaching of Woo inherently teaches the antenna can be formed into a curved shape in advance as claimed). Woo does not specifically disclose that the antenna approaches the back surface side of the first chassis pulled-out state.

Aoto teaches that the antenna approaches the back surface side of the first chassis pulled-out state (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

Regarding claim 3, Woo teaches a folding type portable radio communication terminal and whip antenna according to claim 1. Woo does not specifically disclose a tip of the antenna comes in contact with the back surface of the first chassis in the middle of an open operation of the first and the second chassis, and when the open operation is further performed, whip antenna extended while the tip slides on the back surface the first chassis.

Aoto teaches a tip of the antenna comes in contact with the back surface of the first chassis in the middle of an open operation of the first and the second chassis, and when the open operation is further performed, antenna extended while the tip slides on the back surface the first chassis (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

Regarding claim 4, Woo further teaches the folding type portable radio communication is constructed in such a way that in a state where the first chassis and the second chassis are closed (see fig.2, cover 10a can be closed into main body 10b), the coupling part (see fig.2, item 15) side end part of the second chassis protrudes more than the coupling part side end part of the first chassis (see fig.2), and the whip antenna is provided to be capable of being pulled from a protruding portion of the second chassis (see fig.2, the whip antenna is provided to be capable of being pulled from a protruding portion of the second chassis as claimed).

Regarding claim 6, Woo teaches a folding type portable radio communication terminal and whip antenna according to claim 1. Woo does not specifically disclose the antenna is pulled out in a direction inclined by a specified angle from a vertical direction with respect to an end surface of the second chassis and is held.

Aoto teaches the antenna is pulled out in a direction inclined by a specified angle from a vertical direction with respect to an end surface of the second chassis and is held (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with an inclination*", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woo (US 6,681,125) in view of Aoto (US 6,615,055) and further in view of Naoe (JP02000124732A).

Regarding claim 5, the combination of Woo and Aoto teaches the whip antenna (see Woo, fig.2, antenna 20, see column 3, lines 45-58 and see column 4, lines 49-64). The combination of Woo and Aoto does not specifically disclose the antenna constructed be positioned substantially at a center the coupling part side end part of the second chassis.

Naoe teaches the antenna constructed be positioned substantially at a center the coupling part side end part of the second chassis (see Abstract an fig.2 antenna 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Naoe into the system of Woo and Aoto in order to provide the portable telephone of a structure capable of smoothing the deterioration of the sensitivity of communication caused by the positional relation of the base station (see Naoe, Abstract).

Response to Arguments

5. **a.** Applicant's arguments with respect to claims 5 have been considered but are moot in view of the new ground(s) of rejection.

b. Applicant's arguments filed 10/07/05 have been fully considered but they are not persuasive.

On pages 2 and 4 of applicant's remarks, applicant argues that the teaching of Aoto does not teach the antenna would be pulled out in a direction approaching a back surface side of a first chassis and/or in a direction inclined by a specified angle from a vertical direction.

In response, Aoto teaches an antenna can be pulled out in any direction. Those skilled in the art thus would appreciated that Aoto's antenna can be pulled out in a direction approaching a back surface side of a first chassis and/or in a direction inclined by a specified angle from a vertical direction. In addition, applicant's attention is directed to the rejection of claim 1 above.

On page 3 of applicant's remarks, applicant further argues that there is no motivation to combine Woo and Aoto.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so found in the knowledge generally available to one of ordinary skill in the art so that the antenna can be adjusted for better radio signal.

On page 3 of applicant's remarks, applicant further argues that nowhere does Woo disclose or suggest the formation of the claimed whip antenna into a curved shape in advance.

In response, Woo teaches a whip antenna (see fig.2, antenna 20, see column 3, lines 45-58 and see column 4, lines 49-64). The teaching of Woo inherently teaches the whip antenna is flexible and it is formed into a curved shape due to the gravitation force or vibration and it reads on applicant "a curve shape in advance" (or there is no perfect straight whip antenna).

On page 4 of applicant's remarks, applicant further argues that Aoto or Woo, either alone or in combination, does not disclose that the whip antenna is extended while the tip slides on a back surface of the first chassis.

In response, Woo teaches a whip antenna (see fig.2, antenna 20, see column 3, lines 45-58 and see column 4, lines 49-64) and Aoto teaches an antenna can be pulled out in any direction. Those skilled in the art thus would appreciated that Aoto's antenna can be pulled out in a direction approaching a back surface side of a first chassis. Therefore, the combination of Woo and Aoto does indeed teach applicant claimed invention. In addition, applicant's attention is directed to the rejection of claim 1 above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

12/13/05

Marsha D Banks-Harold

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